

C. diff (Clostridioides difficile)

Clostridioides difficile (C. diff) is a bacteria that causes life-threatening diarrhea. It is usually a side-effect of taking antibiotics. People are **7 to 10 times more likely** to get *C. diff* while on antibiotics and during the month after. This is because antibiotics that fight bacterial infections by killing bad germs can also get rid of the good germs that protect the body against harmful infections, like *C. diff* infection.

Transmission

C. diff bacteria are commonly found in the environment, but most cases of C. diff occur while you're taking antibiotics or not long after you've finished taking antibiotics. Anyone who is taking antibiotics is susceptible, although most cases occur in people who have been hospitalized. C. diff is spread via:

- **Person-to-person** usually from direct hand-to-hand contact.
- **Environment to person** by touching surfaces or sharing personal items like towels and bedding, that have been contaminated with live bacteria or spores.

C. diff risk factors include:

- Older age (65 and older)
- Recent stay at a hospital or nursing home
- A weakened immune system, such as people with HIV/AIDS, cancer, or organ transplant patients taking immunosuppressive drugs
- Previous infection with C. diff or known exposure to the C. diff bacteria
- Taking antibiotics for more than a week

Symptoms

Some people who have C. *diff* never become sick, though they can still spread the infection. C. *diff* illness usually develops during or shortly after a course of antibiotics. But signs and symptoms may not appear for weeks or even months afterward. The most common symptoms of C. *diff* are:

- Diarrhea
- Fever
- Stomach tenderness or pain
- Loss of appetite
- Nausea

Diagnosis

A stool test for the presence of C. diff toxin and clinical signs of illness is used to diagnose C. diff.

Treatment

In about 20% of patients, C. diff will resolve within two to three days of discontinuing the antibiotic to which the patient was previously exposed. C. diff should usually be treated with an appropriate course (about 10 days) of treatment, including oral vancomycin or fidaxomicin. After treatment, repeat C. diff testing is not





recommended if the patient's symptoms have resolved, as patients often remain colonized. *Use the prescription exactly as directed by the provider.*

Prevention

- Hand washing is the number one measure you can do to prevent the spread of C. diff. People who live with you should wash their hands often.
 - o Hands should be washed:
 - Using soap and water
 - Immediately after using the bathroom or assisting someone
 - Before preparing food and eating or joining others for activities
 - After handling soiled clothing or bedding/towels
 - o Alcohol-based hand rubs do not kill the C. diff spores
- Environmental cleaning is also very important.
 - This includes hard surfaces throughout the living area including doorknobs, telephones, and remotes as well as bathroom fixtures and countertops.
 - o Cleaning with one part bleach to nine parts water is recommended.
 - You may also use an Environmental Protection Agency (EPA)-registered disinfectant to clean hard surfaces.
 - For more information on these products, you may go to www.epa.gov.

For more information about the treatment of *C. diff* contact your health care provider or visit www.cdc.gov/cdiff/clinicians/fag.html#treated.

Exclusion Guidance

Children who have C. diff should be excluded from childcare, until afebrile OR if any of the following apply:

- Diarrhea, if the stool is not contained in the diaper or if diarrhea frequency exceeds two or more stools above normal for that child
- A fever or unable to participate and the staff determines that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group

People should not be excluded from school, work, or other activities unless the <u>general exclusions</u> <u>apply.</u> People who provide patient care should consult with their facility's policy on returning to work.

For additional information about *C. diff* contact the North Dakota Department of Health and Human Services', Public Health Division, at 800.427.2180

Resources:

- 1. CDC. (2022, August 2). *C. diff (Clostridioides difficile)*. Centers for Disease Control and Prevention. https://www.cdc.gov/cdiff/index.html
- 2. *Red Book: 2021-2024 Report of the Committee on Infectious Diseases.* 32nd ed. [Clostridioides difficile (formerly Clostridium difficile)]. Kimberlin, DW; Brady, MT; Jackson, MA; Long, SS. American Academy of Pediatrics. 2021: 271-276.
- 3. *Red Book: 2021-2024 Report of the Committee on Infectious Diseases*. 32nd ed. [Management and Prevention of Infectious Diseases]. Kimberlin, DW; Brady, MT; Jackson, MA; Long, SS. American Academy of Pediatrics. 2021: 122-133.

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